

Quantitative Usage Analysis for Ethion

Case # 563122

AI # 58401

Date: 7/6/99

Analyst: Istanbul Yusuf

Based on available pesticide survey usage information for the years 1987 through 1997, an annual estimate of ethion's total domestic usage averaged approximately 883,000 to 1,270,000 pounds of active ingredients (a.i.) for 287,000 to 413,000 acres treated. On average the acreage is treated with 2.4 pounds a.i. per year. The crops with the highest percentages of their total U.S. planted acres treated with ethion are limes (94%), tangelos (39%), grapefruit 33% and oranges (24%).

This quantitative usage analysis (QUA) updates estimated provided in an earlier BEAD usage profile (Yusuf 01/21/98). Please see attached table for estimates.

Ethion Case#: 563122 AI#: 58401 Quantitative Usage Analysis Analyst: Istanbul Yusuf July 7, 1999

Site	Acres Grown (000)	Acres Treated (000)		% of Crop Treated		LB AI Applied (000)		Average Application Rate			States of Most Usage
		Wtd Avg	Est Max	Wtd Avg	Est Max	Wtd Avg	Est Max	lb ai/ acre/ yr	#appl / yr	lb ai/ A/appl	(% of total lb ai used on this site)
Grapefruit	194	65	94	33%	48%	224	324	3.45	1.3	2.58	FL 99%
Lemons	63	0	1	0%	1%	0	1	2.1	1.0	2.11	FL 100%
Oranges	867	208	300	24%	35%	616	888	2.96	1.3	2.22	FL 100%
Limes	6	6	6	94%	100%	18	31	3.1	1.5	2.00	FL 100%
Tangelos	12	3	5	25%	41%	10	17	3.33	1.4	2.33	FL 100%
Tangerines	26	4	8	15%	31%	14	29	3.5	1.2	2.96	FL 100%
Totals		287	413			883	1290				

COLUMN HEADINGS

Wtd Avg = Weighted average--the most recent years and more reliable data are weighted more heavily.

Est Max = Estimated maximum, which is estimated from available data.

Average application rates are calculated from the weighted averages.

NOTES ON TABLE DATA

Usage data primarily covers 1987 - 1996. Calculations of the above numbers may not appear to agree because they are displayed as rounded to the nearest 1000 for acres treated or lb. a.i. (Therefore 0 = < 500)

to the nearest whole percentage point for % of crop treated. (Therefore 0% = < 0.5%)

0* = Available EPA sources indicate that no usage is observed in the reported data for this site, which implies that there is little or no usage.

A dash (-) indicates that information on this site is NOT available in EPA sources or is insufficient.

SOURCES: EPA data, USDA, and National Center for Food and Agricultural Policy